

## **Effects of Control Activities on Operational Efficiency among AIDS Relief Funded Hospitals in Nyanza**

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### **Abstract**

*This article determines the effects of control activities (CAs) and operational efficiency (OE) among AIDS Relief funded hospitals (FBHs) in Nyanza. Non - probability sampling technique under the category of purposive sampling was used. The study comprised of a population of 288 respondents from 10 FBHs funded by AIDS Relief in Nyanza. Research instruments were questionnaire and interview guide. Analysis was through descriptive and inferential statistics. The hospitals have effective CAs as supported clear separation of roles, supervision, approvals, control over information systems and security measures put in place to safeguard the asset .CA explained 45.3% of OE score and recorded significant influence ( $\beta = -.590$ ,  $t(295) = 7.354$ ,  $p < 0.005$ .) in predicting OE score. The slope for "CA" 0.584 was statistically significant in the model at 95% CL. To address the unexplained variance 54.7%, management needs to strengthen the CA as well as other components of internal control.*

**Key Words:** Policies, Procedures/processes, Control Activities, Internal Control, Operational Efficiency among Faith-based organization funded by AIDS Relief project in Nyanza province of Kenya.

### **Introduction**

Control activities were conceived to have significant effects on operational efficiency by means of cost reduction. These encompasses diverse range of policies and procedures that help to ensure management directives are carried out and also ensures that any actions that may be needed to address risks are taken to achieve company objectives. Ray and Pany (2004) point control activities as a component of internal controls and consider control activities as policies and procedures that help ensure that management directives are carried out. Controls activities in an organization basically comprise; performance reviews, information processing, physical controls, and segregation of duties. (Ray & Kurt; 2001) posits that control activities need to be funded by the control environment and there should be continuous monitoring and evaluations as well as reviews by way of audit to enforce compliance.

According to Hayes et al., 2005 control activities is one of the components of internal control whose likelihood of achievement is affected by limitations inherent in all systems of internal control. Control activities are the basis of assurance and are only possible with the establishment of effective internal control system (Bushman, 2007). Ashbaugh –skaife, Collins, Keeney and la fond (2009) posit that weak internal controls allow or introduce both intentional and unintentional misstatements into the financial reporting process that lead to lower quality accruals. Due to diffuse shareholders, internal controls are no less important for NGOs than for businesses (Sunder 2002). More recently; Goodwin-Stewart & Kent (2006) provided evidence that the existence of an internal audit function is related to the level of commitment to risk management.

Control activities occur throughout the organization, at all levels and in all functions – be it in small or large companies. Preventive controls are proactive in nature and seek to prevent undesirable events from occurring as well as deter losses and includes; separation of duties, proper authorization, adequate documentation, and physical control over assets.

Detective controls, on the other hand, attempt to identify undesirable acts hence make it evident that a certain loss has occurred but they do not prevent a loss from occurring and includes; reviews, analyses, variance analyses, reconciliations, physical inventories, and audit (COSO, 1992).

A custodian of an asset should not perform an accounting function relating to that asset to protect the entity against malpractices. When one performs both functions, there is an excessive risk of that person disposing off the asset for personal gains and adjusting the records to relieve oneself of responsibility. Where possible it is desirable to prevent persons who authorize transactions from having control over the related assets and being in possession of ownership documents of such assets. The authorization of a transaction and the handling of the related assets and ownership documents by the same person increase the possibility of malpractices within the organization. If each department or division in an organization were responsible for preparing its own records and reports, there would be a tendency to bias the results to improve its reported performance. In order to ensure unbiased information, record keeping is typically included in a separate department under the chief accountant (Keitany, 2000).

There should also be adequate separation of duties within the accounting function. An effective system of internal control should not allow an employee to process a transaction from its original to its ultimate posting and preparation of the financial statements. This would allow for non detection of intentional or unintentional errors and sloppy performance of duties. The system in operation should make provisions for proper authorization or approval of all transactions by appropriate individuals whose authorization limits is clearly outlined. Authorization can either be general or specific. General authorization means that the management establishes policies for the organization to follow. Subordinates are instructed to implement these general authorizations by approving all transactions within the limits set by the policy (Keitany, 2000). Specific authorization has to do with individual transactions. Management is often unwilling to establish a general policy of authorization for some transactions. Instead it prefers to make authorizations on a case by case basis.

Documents and records are the physical objects upon which transactions are entered and summarized. They include such diverse items as sales invoice, purchase orders, sales journals and employee time sheets. Both documents of original entry and records upon which transactions are entered are important but the inadequacy of documents normally causes greater control problems. Documents perform the functions of transmitting information throughout the organization and between different organizations and hence must be adequate to provide reasonable assurance that all assets are properly controlled and records well maintained. Certain relevant principles dictate the proper design and use of documents and records. Documents and records should be: Pre-numbered serially so as to facilitate control over missing documents as well as easy retrieval when needed, prepared as soon as transactions takes place, sufficiently simple to ensure that they are clearly understood, designed for multiple uses whenever possible and constructed in a manner that encourages correct preparation (COSO, 1992).

### ***Methodology***

Non - probability sampling technique under the category of purposive sampling was used. Target group comprised of basic components such as; top management, middle management, operations support and operations core staff (Laurie J. Mullins). The study comprised of a population of 288 respondents from 10 faith based hospitals funded by AIDS Relief in Nyanza. A sample size of 165 respondents was drawn at 95% confidence level (CL) and a confidence interval of 5 and later corrected for finite population. The research instrument was a questionnaire and interview guide. Analysis of the data was done using descriptive statistics and inferential statistics using Statistical Package for Social Science (SPSS) software in analyzing data. The former included means, standard deviations, and latter entailed linear and multiple regression analysis. Analyzed data was used as a basis of discussion and finally conclusions were drawn from the discussions.

### ***Results and Discussion***

In this section the researcher sought to determine the effects of control activities on operational efficiency among AIDS Relief funded hospitals in Nyanza by establishing the respondents' agreement with the statements on control activities. Several statements were presented to which the respondents answered differently.

**Table 1: Management reviews operations**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Monthly	43	29.3
Quarterly	29	19.7
Semi-Annually	16	10.9
Annually	53	36.1
Never	6	4.1
<b>Total</b>	<b>147</b>	<b>100.0</b>

The question sought to establish the frequency at which management reviews the operations to ensure they promote rather than hamper operational efficiency. 53 (36.1%) indicated that the reviews were done annually, 43(29.3%) said monthly, 29(19.7%) agreed with quarterly while 6 (4.1%) indicated that management never review operations. In general, the respondents agreed that review of operations were done at least annually, a fact that does not overrule the sectorial reviews done from time in line with the responses.

**Table 2: The operational guidelines are updated**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Monthly	11	7.5
Quarterly	27	18.4
Semi-Annually	11	7.5
Annually	71	48.3
Never	27	18.4
<b>Total</b>	<b>147</b>	<b>100.0</b>

Overwhelming respondents' 71(48.3%) agreed that operational guidelines are updated at least; annually, quarterly and never each was represented by 27(18.4 %). Finally, 11(7.5%) each agreed that the operational guidelines are updated either monthly or semi-annually. When probed further, it was noted that the updates to general operational guidelines were done annually and shared at the annual general meeting. This however, did not mean that they were only done annually but continually over time as the need arose and in most cases already piloted within the departments affected at the time of update.

**Table 3 Reconciliations done on key accounts**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Daily	16	10.9
Weekly	11	7.5
Fortnightly	4	2.7
Monthly	109	74.1
Never	7	4.8
<b>Total</b>	<b>147</b>	<b>100.0</b>

The study further sought to establish the frequency at which the key accounting records like bank, cashbooks, accounts receivables, accounts payables etc. are reconciled. An overwhelming majority 74.1% indicated that reconciliations were done on a monthly basis, 10.9% indicated daily and a further probe indicated that this was being done at all cashiering points for all cash and cash equivalents, 7.5% indicated that the reconciliations were done on a weekly basis, paltry respondents representing 4.8% and 2.7% indicated that reconciliations were never done or done fortnightly respectively.

**Table 4 Periodic equipment audits done to verify the assets**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Monthly	9	6.1
Quarterly	25	17.0
Semi-Annually	19	12.9
Annually	88	59.9
Never	6	4.1
<b>Total</b>	<b>147</b>	<b>100.0</b>

The study sought to establish the respondents' ratings on the statements with regard to verification of assets and equipment belonging to the organizations in which they work. An overwhelming majority 88 (59.9%) indicated that annual reviews are done on the assets belonging to their organization, 25 respondents answered quarterly making up 17%, 19 (12.9%) respondents rated semi-annually, 9 (6.1%) while paltry respondents 6 (4.1%) answered periodic verification of assets were never done in the organizations in which they worked.

**Table 5 Financial documents securely kept when not in use**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Cash box	20	13.6
Safe	25	17.0
Lockable cabinet	100	68.0
Other	2	1.4
<b>Total</b>	<b>147</b>	<b>100.0</b>

On whether cash receipts and cheque books are kept in a secure place until deposited and while not in use, 100 respondents representing 68% indicated that a lockable cabinet was in use to ensure safe custody, 25 respondents representing 17% indicated that a safe was in use, 20 respondents representing 13.6% agreed that cashbox was in use while 2 other respondents representing 1.4% chose on other which included lockable drawers, tills, lockable room with restricted access. In general, there was consensus that the financial documents are securely kept in a lockable place to curb on unnecessary losses.

**Table 6 Control Activities**

<b>Control Activities</b>	<b>SD</b>	<b>D</b>	<b>NS</b>	<b>A</b>	<b>SA</b>
Our institution has clear separation of roles	4.8%	10.2%	7.5%	59.8%	17.7%
Every employees work check on the others	6.1%	9.5%	12.2%	67.4%	4.8%
There is appropriate supervision by senior staff on the work of their juniors	2.7%	2.7%	10.9%	67.4%	16.3%
There are adequate controls over information systems	1.4%	8.2%	20.4%	56.4%	13.6%
Staff are trained to discharge their responsibilities diligently	2.7%	4.8%	14.3%	58.5%	19.7%
Our facility has a well-developed chart of accounts	3.4%	7.5%	19.0%	57.9%	12.2%
All transactions are duly authorized	2.0%	4.8%	12.2%	63.3%	17.7%
There is accountability of funds advanced for projects activities	2.0%	2.7%	9.5%	58.6%	27.2%
Controls are in place to exclude incurring expenditure in excess allocated funds	1.4%	1.4%	21.0%	63.3%	12.9%
There is adequate control over access to resources belonging to the facility.	1.4%	2.7%	19.7%	59.9%	16.3%
All changes to employee status or pay rate are duly approved by an appropriate official.	3.4%	2.7%	11.6%	55.8%	26.5%
The tendering process is free of manipulations	7.5%	7.5%	35.4%	40.1%	9.5%
All cheques received are made payable to the name of the organization	0.7%	0.0%	21.1%	53.0%	25.2%
Accounting documents are pre-numbered(LPO, receipt, delivery) for ease of reference	4.1%	4.8%	19.0%	53.1%	19.0%

The study findings indicated that majority 77.5% of the respondents agreed that there were clear separation of roles, 15% of the respondents disagreed with the statement indicating their dissatisfaction with the manner in which roles were segregated within their organizations while 7.5% were not sure as to the clarity of separation of roles. When asked whether every employee's work checked on others, 72.2% agreed, 15.6% disagreed and 12.2% were not sure.

On supervision, 83.7% agreed there is appropriate supervision by senior staff on the work of the junior staff, 5.4% of the respondents' disagreed with the statement while 10.9% remained neutral as to the appropriateness of the supervision. The analysis also indicated that 70.0% of the respondents were in agreement that there were adequate controls over information system, 9.6% disagreed with the statement and 20.4% of the respondents, were not sure as to the existence of adequate controls over information systems.

When asked about the trainings offered to staff to be able to discharge their responsibilities diligently, an overwhelming 78.2% agreed with the statement, 7.5% indicated their dissatisfaction while 14.3% were not sure whether or not staff is trained.

A look into whether the hospitals has a well-developed chart of accounts indicated that 70.1% were in agreement, 10.9% disagreed while 19% were not sure. It was however, overwhelmingly agreed by respondents at 81% that all transactions are duly authorized with paltry respondents indicating their disagreement at 6.8% while 12.2% of the respondents were not sure of the approvals of transactions.

In terms of accountability of funds advanced for project activities, 85.8% agreed with the statement, 4.7% disagreed and 9.5% of the respondents were not sure of the accountabilities of the project advances. It was however, interesting to note that 76.2% of the respondents' agreed controls exist in their organizations to exclude incurring expenditure in excess allocated funds. 21.0% respondents' were not sure while a paltry 2.8% disagreed with the statement. When asked about the adequacy of control over access to resources belonging to the facility, 76.2% agreed the controls are adequate, 4.1 % disagreed while 19.7% were not sure .On payroll controls, 82.3% of the respondents agreed that all changes to employee status or pay rate are duly approved by an appropriate official, 6.1 % disagreed while 11.6% were not sure

Tendering process is one of the areas that respondents' least agreed with 49.6% the lowest level of agreement ever recorded in the control activities statements.15% disagreed while 35.4% were not sure whether the tendering process within their hospitals are free of manipulations. This kind of response looked at critically revealed that not many people were involved in procurement process but just a few hence not in the general staff knowledge. 78.2% agreed that all cheques received are made payable in the name of the organization, 0.7% of the respondents disagreed this being the lowest level of disagreement under the control activities while 21.1% remained neutral. The high level of neutral stand justifies the fact that not everyone has access to the financial records and specifically the cheques which are securely kept.

On the other hand, 72.1% of the respondents' agreed that accounting documents are pre-numbered (LPO, receipt, delivery) for ease of reference, 8.9% disagreed while the remaining 21% of the respondents were not sure of the pre-numbering of accounting documents within their organizations. The high level of neutral stand was justified by the fact that not everyone had access to the financial records or their work had minimal or no interaction with financial records or was not keen to recognize and comprehend the numbering of documents. The summary of ratings relating to the control activities is as shown in table 6.

In order to check the significance of the independent variables and the dependent variables further, linear regression analysis was done. Multiple regression analysis was used to predict the effect of the independent variables (Control environment, internal audit and control activities) on the dependent variable (operational efficiency). The R Square statistic reports the proportion of explained variance in the dependent variable that is accounted for by the independent variables. The results of the regression analysis showed that the three predictors explained 45.3% of the variance in operational efficiency. Control activities score ( $R^2=.453$ ,  $F(3,143)=39.524$ ,  $p<.05$ )with respect to operational efficiency score. The other components of internal control (entity's risk assessment process, the information and communication systems) held constant in the study, accounted for the unexplained variance 54.7%.

**Table 7 Significance of Variables**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.106	3	6.702	39.524	.000b
	Residual	24.248	143	.170		
	Total	44.354	146			

a. Dependent Variable: Operational Efficiency

b. Predictors: (Constant), Control Activities, Internal Audit, Control Environment

The results also showed that control activities recorded ( $\beta = -.590$ ,  $t(295) = 7.354$ ,  $p < 0.005$ .) in predicting operational efficiency. Hospitals have effective control activities in place as the association was not by chance but rather through a conscious effort by the management and entire team within the various faith-based hospitals funded by AIDS Relief project.

**Table 8 Regression Analysis**

Co-efficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.943	.258		3.652	.000
	Control Environment	.222	.080	.243	2.778	.006
	Internal Audit	-.113	.038	-.227	-2.972	.003
	Control Activities	.584	.079	.590	7.354	.000
a. Dependent Variable: Operational Efficiency						

The slope for the independent variables “control activities” was the only statistically significant variables in the model at 95% confidence level at 0.584. Thus, a one unit increase in control activities score corresponded with a 0.584 increase in the dependent variable operational efficiency score. This suggests that the purpose for which the control activities was being used by the management within their various hospitals was more important in ensuring operational efficiency score.

### **Conclusion**

Based on the findings of the study, the researcher concluded that the hospitals had well established control activities with significant effects on operational efficiency as confirmed by confirmed by clear separation of roles, appropriate supervision by senior staff on the work of juniors and those trainings are available to boost staff competences in relation to the work they do within their various hospitals. Equally, there is control over information systems and security measures are put in place to safeguard the assets of the hospitals. Additionally, it became apparent that all cheques received are made payable in the name of the hospital and project advances are appropriately accounted for. Finally, there is clear chart of accounts, all transactions are duly approved including any changes in status of staff or pay rate and budget monitoring done to ensure expenditure is not incurred in excess of allocated funds. Equally the effects of control activities are confirmed by both the slope and control activities score with regard to operational efficiency. However, there are still challenges with regard to communication and enforcement as well as compliance to the internal controls especially considering that the audit function is not well staffed or nonexistent in certain hospitals which clearly have affected their efficiency as revealed by this study.

In isolation, control activities cannot adequately address the internal control challenges hence should be reinforced by the other components of internal control such as internal audit as a way of monitoring, control environment that sets tone at the top, communication as a glue that holds the other components together and risk assessment to be able to put measures in place before hand to mitigate anticipated risks. In light of the research findings, the researcher recommends less dependence on external auditors but competence profiling and staffing of the internal audit department by faith based hospitals to be able to adequately cover the entire hospital set up, conduct regular audit activities, operate efficiently as well ensure regular reporting, this way faith based hospitals will ensure high level of compliance with updated and realistic control activities that not only promote achievement of objectives but also ensure operational excellence which ultimately attracts more funding/support.

Overall, this study concludes that there is significant influence by internal control systems especially control activities as an internal control component on operational efficiency (as product quality, customer satisfaction, and new product development). It improves organizational workflows such as planning and budgeting, communication within different cadres of the organization, financial reporting and compliance to different NGO stakeholders.

### **Recommendation**

Since it was evident in the study that there were issues with regard to communication and enforcement of the control activities the researcher recommends that control activities should be implemented with caution otherwise they may paralyze the operations and deter the hospitals from achieving their goals. An effective control therefore, is: integrated in the planning at the outset of the internal management process with ample provision for control built in; able to accommodate change and revisions, without management having to develop and implement an expensive new control system; provide an accurate picture of the situation hence helps avoid inaccurate or unreliable information leads to incorrect or inappropriate modifications to plans; timely in the sense that information is gathered regularly to enable management to take corrective action immediately where necessary; and simple that is to say, it is to-the-point (too much information makes great demands on the time and attention of management, leading to an expensive control system which is of little benefit).

Finally, due to legitimate doubts about the ability of individuals to sustain their capabilities for selflessness in the face of overwhelming temptations emerging from their positions of power, management should consider it their responsibility to ensure that an effective internal control system is in place. This way, the management will ensure that all the organization's resources are meaningfully deployed so that the mission and goals of the organization can be attained. For the process to achieve operational efficiency however, management should ensure an iterative circular and continuous process of: Setting standards based on goals, measuring actual performance, evaluating deviations /performance gap and taking corrective action in rectifying deviations. The management needs to strengthen other components of internal control (the entity's risk assessment process, the information and communication systems,) alongside the control environment, control activities and the monitoring of controls to address the unexplained variance 54.7% alongside internal audit to ultimately boost on their OE.

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